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# NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 12/30/2008

OBER, KALER, GRIMES & SHRIVER ATTORNEYS AT LAW 120 EAST BALTIMORE STREET BALTIMORE, MD 21202-1643

EXAMINER					
SHAH, SAMIR M					
ART UNIT	PAPER NUMBER				
2856	•				

DATE MAILED: 12/30/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,697	04/17/2007	Francis Scott Corey		5413

TITLE OF INVENTION: METHOD AND APPARATUS FOR ULTRASONIC DETERMINATION OF HEMATOCRIT AND HEMOGLOBIN CONCENTRATIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	03/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NO THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further c indicated unless corrected maintenance fee notification	form should be used for correspondence includir d below or directed oth	or trans ig the P ierwise	smitting the ISSU atent, advance or in Block 1, by (a	JE FEE and PUBLICATI rders and notification of r a) specifying a new corres	ON FEE (if requi naintenance fees w pondence address;	ired). I /ill be and/or	Blocks 1 through 5 st mailed to the current (b) indicating a sepa	hould be completed where correspondence address as trate "FEE ADDRESS" for
CURRINT CORRISPONDENCE ADDRESS (Name the Book 1 for any change of address)  7890  OBER, KALER, GRIMES & SHRIVER ATTORNEYS AT LAW 120 EAST BALTIMORE STREET			Not Feel paps have	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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BALTIMORE, M	4D 21202-1643							(Depositor's name)
								(Signature)
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10/580,697	04/17/2007			Francis Scott Corey			•	5413
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nonprovisional	YES		\$755	\$300	\$0		\$1055	03/30/2009
EXAMI	NER		ART UNIT	CLASS-SUBCLASS	]			
SHAH, SA	AMIR M		2856	073-627000				
1. Change of correspondence address or indication of 'Tee Address' (27 CFR 1.363).  Change of correspondence address for Change of Correspondence Address for Change of Correspondence Address for PIONSB/123 attached.  The Address' indication for 'Tee Address' Indication form PIONSB/147 we 0.3-02 or more recent) attached. Use of a Customer Number is required.  3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON			or agents OR, alternation (2) the name of a single registered attorney or a 2 registered patent attorney in the listed, no name will be	(1) the names of up to 3 registered patent attorneys  1. or agents OR, alternatively, (2) the name of a single firm flaving as a member a  2-registered attorney or agent) and the names of up to  1. or agent of a single firm flaving as a member a  2-registered attorney or agent) and the names of up to  3. or an annied will be printed.				
PLEASE NOTE: Unle recordation as set forth (A) NAME OF ASSIG	ess an assignee is ident nin 37 CFR 3.11. Comp	ified be oletion o	low, no assignee of this form is NO	data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY	atent. If an assign assignment. and STATE OR C	OUNT	RY)	ocument has been filed for
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	o small entity discount p	ermitte	d)	☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any				
Advance Order - #	of Copies			overpayment, to Depo	authorized to char sit Account Numbe	ge the	required fee(s), any de enclose a	ficiency, or credit any n extra copy of this form).
	SMALL ENTITY state	is. See 3	37 CFR 1.27.	b. Applicant is no lon				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if req ecords of the United Sta	uired) w tes Pate	rill not be accepted nt and Trademark	d from anyone other than t Office.	he applicant; a regi	stered :	attorney or agent; or th	e assignee or other party in
Authorized Signature _					Date			
Typed or printed name Registration No								
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#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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75	90 12/30/2008		EXAM	UNER
OBER, KALER,	GRIMES & SHRIV	ER	SHAH, S	AMIR M
ATTORNEYS AT			ART UNIT	PAPER NUMBER
120 EAST BALTII BALTIMORE, MI			2856	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 49 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 49 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)	
10/580,697	COREY ET AL.	
Examiner	Art Unit	
SAMIR M SHAH	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 12/02/2008.
- The allowed claim(s) is/are 1-20.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - b) ☐ Some\* c) ☐ None of the:
    - Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_
    - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
  - 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-946).
- Information Disclosure Statements (PTO/SB/08). Pacer No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- 6 Interview Summery (PTO-413). Paper No./Mail Date
- Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other Samir M. Shah (571) 272-2671

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

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Art Unit: 2856

### EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

- Authorization for this examiner's amendment was given in a telephone interview with Mr. Royal Craig on 12/15/2008.
- 3. The application has been amended as follows:
- (a) As to claim 8, last line, delete "stationery" and replace it with --stationary--.
- (b) As to claims 13 and 14, line 2, delete "analyzer" and replace it with --analysis unit--.
- (c) As to claims 15 and 16, last line, delete "analyzer" and replace it with --analysis unit--.
- (d) As to claim 17, line 6, delete "hemoglobin in" and replace it with —hemoglobin concentration in—

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Art Unit: 2856

#### Reasons for Allowance

Claims 1-20 are allowed.

5. The following is an examiner's statement of reasons for allowance:

(a) As to claims 1-10 and 18-20, the prior art does not expressly disclose or provide motivation to combine a system for determining hematocrit or hemoglobin concentration of blood with an analyzer for receiving a sampling device for collecting blood, with at least one ultrasonic transducer oriented toward an aperture in the sampling device for

emitting an ultrasonic signal into the blood sample while still inside the sampling device.

- (b) As to claims 11-16, the prior art does not expressly disclose or provide motivation to combine an apparatus for determining hematocrit or hemoglobin concentration of blood by ultrasonic analysis that includes a sampling device for acquiring a blood sample having a finger-grip at one end and an opposing functional end that includes a collecting region for collecting by capillary action, and a testing region and a pumping region.
- (c) As to claim 17, the prior art does not expressly disclose or provide motivation to combine a blood analysis device for ultrasonically analyzing blood including a disposable blood sampling device that collects a sample by capillary action, and a means for transferring the blood to a testing cell by pressure differential.

Application/Control Number: 10/580,697

Art Unit: 2856

(d) The closest prior art reference, Brimhall et al. (US Patent 4,854,170 henceforth "Brimhall") discloses an "apparatus and method for using ultrasound to determine hematocrit" including a sampling device/capillary tube (12) for collecting a blood sample (20), an analyzer, a signal/frequency generator (16) for generating an electronic signal, at least one ultrasound transducer (14) coupled to the generator (16) for converting the electronic signal to an ultrasonic signal, a receiver and a processor (figures 1-3; column 3, line 37 - column 4, line 36).

However, Brimhall does not disclose or provide motivation to combine with the prior art, the above-mentioned respective limitations in claims 1-20, respectively.

- 6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMIR M. SHAH whose telephone number is (571)272-2671. The examiner can normally be reached on Monday-Friday 10:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samir M. Shah Art Unit 2856 12/13/2008 /Hezron Williams/ Supervisory Patent Examiner, Art Unit 2856